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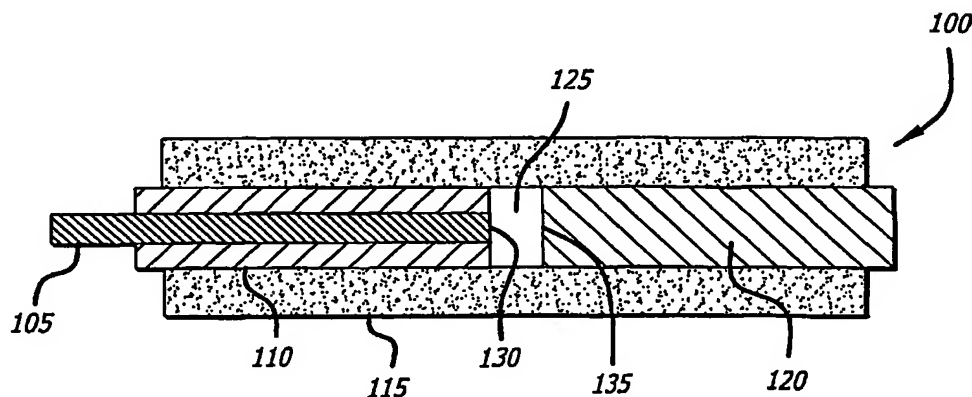
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(54) Title: **RUGGED FABRY-PEROT PRESSURE SENSOR**



(57) Abstract: A pressure sensor (100) and system for measuring pressure changes, especially in harsh environments, is described. The pressure sensor has a Fabry-Perot optical cavity formed within a tube (115) with a partial reflective mirror (130) provided by an end of an optical fiber (105) and a reflective mirror (135) provided by an end of a plug (120), with a gap (125) formed between. The pressure sensor may be disposed within a sensing chamber of a housing having an opening into the environment to be monitored. Alternatively, an isolator means may be used to isolate the sensor from the environment while communicating pressure changes to the sensing chamber. In another embodiment, the sensing chamber is filled with a compressible non-flowing material.

WO 2005/033643 A3